Presentation Overview

1. Team ........................................................................................................... 3
2. Background .................................................................................................. 4 - 7
3. Problem ........................................................................................................ 8 - 11
4. Solution ....................................................................................................... 12 - 17
5. Customers & End-Users .............................................................................. 18 - 19
6. Benefits ....................................................................................................... 20
7. Competition ................................................................................................ 21 - 22
8. Conclusion .................................................................................................. 23 - 24
9. References .................................................................................................. 25 - 28
The Team

- Alex Wojtowicz: Project Manager/Developer
- Brandon Campbell: DB Manager/Back-End Developer
- John Hessefort: Domain Expert/Developer
- Duncan Holterhaus: Quality Assurance/Developer
- Jamauni Taylor: Webmaster/Front-End Developer
- Dwight Owings: Research Analyst/Developer
University Students and Tutoring

- University students study at no specific time of the day.  

- Some studies even suggest that more students study at night as opposed to daytime.  

The Private Tutoring Market

- Private tutoring is a growing industry.
- However, there is no centralized network for tutors.
- Most tutor-hosting services only tend to focus in the online tutoring market.
University Students & Tutoring

- **Student-to-student interactions are effective; tutees learn more cognitively through bonds with their peers.**
- **PAL is a peer mediated instructional program where students tutor their peers.**
- **Peer Assisted Learning Programs (PAL) proves that students tutoring other students is effective.**
- **University students are willing to tutor people what they know in their free time if it is easy to find people to tutor.**
The Current State of University Tutoring

- Take ODU as one example.
  - Tutoring resources are not centralized.  
  - Less than half of course-specific tutoring covers 300 Level and above.  
  - Tutoring centers are predominantly opened exclusively during the daytime.  
  - Not enough tutors working in tutoring centers.  
  - Many students qualify to tutor, yet they don’t work for the university as tutors.  
  - There are many students on campus willing to tutor, they are not being utilized, and students need the help.
Problem Statement

- In general, tutoring services available to university students are limited in scope, do not provide flexibility, and lack a centralized platform for promotion.
- Students willing to provide tutoring services lack a tool to promote those services.
Problem Characteristics

- **Limited scope**, i.e., Tutoring is only offered for about 5% of all available ODU courses.\(^1,3\)
- Tutoring services do not encompass all study times.\(^2\)
- **Information inconsistency**, i.e., Information available about university tutoring services is dispersed and not always accurate.\(^2\)
- Current information regarding when and where certain course-specific tutoring sessions is not always reliable.
- **Private tutors are complete unknowns.** Students who find it necessary to seek tutoring outside of the university cannot be confident that the available services will be a good match for university-specific course material.
- University students do not have an adequate platform to advertise their tutoring services.
Solution Statement

- Tutor Dash is an application-based service that unifies university students who are interested in tutoring with university students who desire course-specific tutoring in real-time.

- Tutor Dash provides an extension of any university’s current tutoring services so that students can receive help for all courses 24/7.
Solution Characteristics

- Only university students and tutoring center staff can use Tutor Dash.
- Allows Information to be updated frequently by the university’s student tutors in real-time.
- Every tutor is required to provide verification.
- Implements a rating system for quality assurance.
- Qualified students can tutor in any class available at their university.
- Tutors & tutees can make themselves available at any desired time.
- Notifications will be sent to connect participating tutors/tutees.
- Tutoring center Check-in’s & Check-out's.
- Mechanism for payments is included within application.
Tutor Dash’s Solution

- Merge the solutions to both problems into one tool.
- Get rid of excessive options.
- Less is more
Solution Process Flow

1. University student wants to offer private tutoring services
2. University student seeks tutoring services
3. Download Tutor Dash on smartphone
4. Input basic user information
5. Request academic transcript from university registrar
6. Wait period (setup-only)
7. Send out notifications to potential tutees
8. Send out notifications to local tutors
9. Tutors get notified when potential tutees are available in the area.
10. Tutor Dash
11. Tutoring session is scheduled in real-time
12. Tutoring session occurs
13. Did the tutor charge?
14. Yes: Tutor receives payment
15. No: Tutor rates tutor
16. Tutees are notified when potential tutors are available in the area.

Initial Setup (Before usage)
Major Functional Component Diagram

- **End-Users**
  - University Students
    - Tutors
    - Tutees

- **Client Devices**
  - Smartphones

- **University Registrar**
  - Possess academic transcript PDFs

- **Email Server**
  - Transcript receiver

- **Parsing Algorithm**
  - Email scraper
  - PDF scraper
  - Transcript analysis

- **Database Server**
  - Firebase
  - User info
  - Course info
  - Reviews

- **GUI**
  - Tutors & Tutees interact
  - Notifications

- **Network**
  - Courses completed
  - User information
  - GPS coordinates

- **Tutor Dash**

- **Legend**
  - Hardware
  - Software
  - Entities

- **Google Hangouts**
  - Web Conferencing

- **Google Maps API**
  - Relative distance
  - GUI integration

- **Payment Mechanism**
  - Braintree
  - PayPal
What Tutor Dash Won’t Do

- Not an “official” university tutoring resource, rather a tool for presenting information on a unique platform.

- Will not make any money off of existing university tutoring resources.

- Will not interfere with current university tutoring resources; only improve advertisement to extend reach.

- Will not violate the Family Education Rights and Privacy Act (FERPA).

- Cannot guarantee there is a tutor for everyone online 24/7.

- Cannot prevent students from voluntarily violating the honor code.

- Will not be a hosting platform for established tutoring businesses.
Customers

- University students seeking tutoring services
- University students interested in tutoring
End Users

- **University Student bodies**
  - University students looking for tutors
  - University students looking for tutees.
  - University students looking for ways to make extra money by tutoring in their free time.
Benefits to Customer Base

● Expands the scope of any university’s course-specific tutoring program(s).
● Decreases availability conflicts.
● Tutors aren’t waiting around for responses.
● Reduces frequency of cancellations by providing real-time scheduling.
● As tutoring increases, DFWI rates decrease. Students save GPA and money.
● Students won’t have to go out of their way in search of tutoring services since they are contained conveniently in one place.
● Alleviates frustration in regards to contradictory information. Improves information consistency.
## Competition

<table>
<thead>
<tr>
<th>Features</th>
<th>US</th>
<th>DIRECT COMPETITORS</th>
<th>INDIRECT COMPETITORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offers various university course-specific tutoring</td>
<td>✔️</td>
<td>✔️</td>
<td>x</td>
</tr>
<tr>
<td>Allows qualified undergraduate students to be tutors</td>
<td>✔️</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Sends notifications about local tutors/tutees</td>
<td>✔️</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Qualified tutors are constrained to university communities</td>
<td>✔️</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Provides real-time scheduling capabilities</td>
<td>✔️</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Available as mobile application</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Includes online tutoring options</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Includes in-person tutoring options</td>
<td>✔️</td>
<td>x</td>
<td>✔️</td>
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<tr>
<td>Provides tutor ratings</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Establishes hourly rate ceilings</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Requires tutor verification/validation</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Does not require subscription commitment</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Provides 24/7 scheduling</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>
More on Tutor.com

- ODU currently has a trial of tutor.com.
- Tutor.com is a purely online-based tutoring service that specializes in real-time scheduling 24/7.
- This offers only 8 additional courses exclusively covered by tutor.com.\(^3\),\(^18\)
- Students cannot be tutors on tutor.com.
- Helps to expand available tutoring resources, BUT doesn't help make use of existing underutilized resources.
- Doesn't unify and engage university student bodies.
- By itself, tutor.com is not an efficient solution to the problem. Students are less likely to accept help from tutors who are not students. Universities still have underutilized resources.
Why Is This Worth Doing?

- There is an unsatisfied demand for tutors at universities.
- Relevancy: As the private tutoring market expands, the demand for private tutoring resources increases.
- Universities can benefit from a more centralized tutoring information resource.
- Students can benefit both intellectually and socially.
- DFWI - Drop/Failed/Withdraw/Incomplete ratings will improve with student understanding.
- Students receive more tutoring opportunities.
In Summary

- High demand for tutors at universities.
- Qualified students interested in tutoring are an untapped resource at universities.
- Need for a more centralization of tutoring resources within various university environments.
- Tutor Dash makes this connection obvious.
References - University Tutoring Resources


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5. Ciscell, Galen, et al. "Barriers to Accessing Tutoring Services Among Students Who Received a MidSemester Warning." ERIC, Pacific Lutheran University - Department of Sociology, 2016. URL: files.eric.ed.gov/fulltext/EJ1114513.pdf


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14. "Find a Local In-Home Tutor Today." HeyTutor, HeyTutor LLC. URL: heytutor.com/


Questions?